

Notice of Allowability

Application No.

10/670,200

Examiner

Jean E. Lesperance

Applicant(s)

KANNO ET AL.

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2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed September 26, 2003.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/26/03, 1/20/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

DETAILED ACTION

1. Claims 1 to 14 are presented for examination.

Allowable Subject Matter

2. Claims 1 to 14 are allowed.
3. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a light-emitting device.

Independent claims 1 and 7 identify a uniquely distinct feature "wherein a first optical film thickness range L.sub.1 from a light-emitting position of said first emission layer to said light-emitting surface of the device, a second optical film thickness range L.sub.2 from a light-emitting position of said second emission layer to said light-emitting surface, and respective film thicknesses of said plurality of layers, said first emission layer and said second emission layer are set, so as to increase the luminous intensity of color of an emission produced by mixing an emission from said first emission layer with an emission from said second emission layer".

Independent claim 8 identifies a uniquely distinct feature "wherein a first optical film thickness range L.sub.1 from a light-emitting position of said first emission layer to said light-emitting surface of the device, a second optical film thickness range L.sub.2 from a light-emitting position of said second emission layer to said light-emitting surface, and respective film thicknesses of said plurality of layers, said first emission layer and said second emission layer are set, so as to increase the luminous intensity in the first

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maximum wavelength region $\lambda_{sub.X}$ of an emission spectrum provided by said first emission layer, and increase the luminous intensity in the second maximum wavelength region $\lambda_{sub.Y}$ of an emission spectrum provided by said second emission layer”.

Independent claim 14 identifies a uniquely distinct feature “wherein a first optical film thickness range $L_{sub.1}$ from a light-emitting position of said first emission layer to said light-emitting surface of the device, a second optical film thickness range $L_{sub.2}$ from a light-emitting position of said second emission layer to said light-emitting surface, and respective film thicknesses of said plurality of layers, said first emission layer and said second emission layer are set according to expressions as follows, so as to increase the luminous intensity in the first maximum wavelength region $\lambda_{sub.X}$ of an emission spectrum provided by said first emission layer, and increase the luminous intensity in the second maximum wavelength region $\lambda_{sub.Y}$ of an emission spectrum provided by said second emission layer”.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fukuyama et al. (6,831,406), Fukuda (6,541,130) and Kuwata et al. (4,995,043).

The closest arts Fukuyama et al., Fukuda and Kuwata et al. as discussed above, either singularly or in combination, fail to anticipate or render obvious the above limitations obvious.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

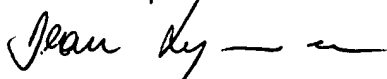
or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



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Date 4/27/2006



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600